

WECX-QM771

Intel QM77

User Manual

Rev.01, Jun. 2013

Statement

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All product specifications are subject to change without prior notice

Packing List

- ☐ WECX-QM771
- ☐ Driver CD (Include user's manual)

Ordering Information

- ☐ 1 x PS2 Y Cable(KB and Mouse)
- ☐ 1 x 2 Port COM Cable with Bracket
- ☐ 1 x 2 Port USB Cable with Bracket
- ☐ 1 x SATA Cable
- ☐ 1 x SATA Power Cable
- ☐ 1 x RJ45 8P8C to COM Cable

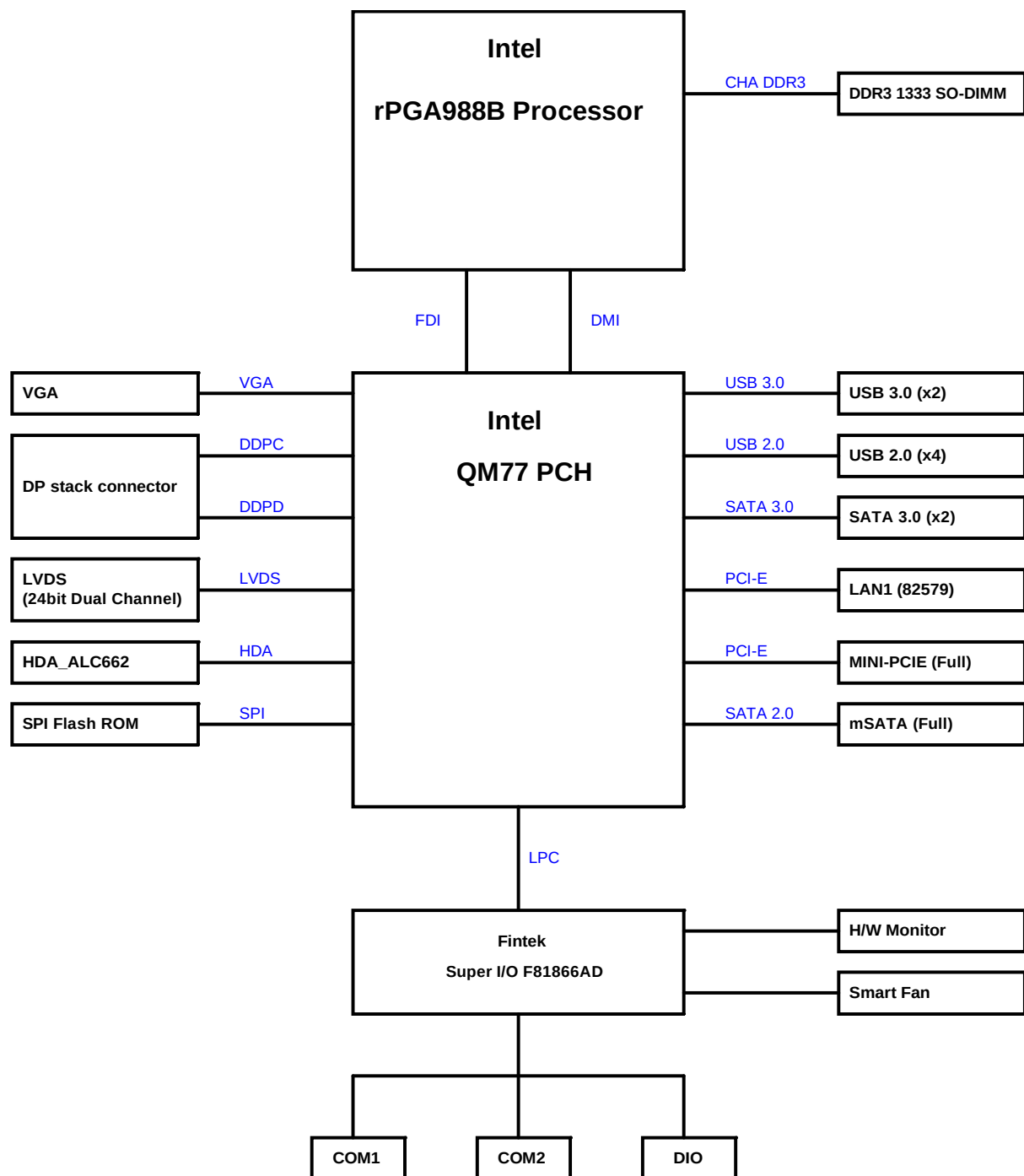
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Chapter 1 Product Information

This chapter introduces the product features, jumper and connector information.

1.1 Block Diagram

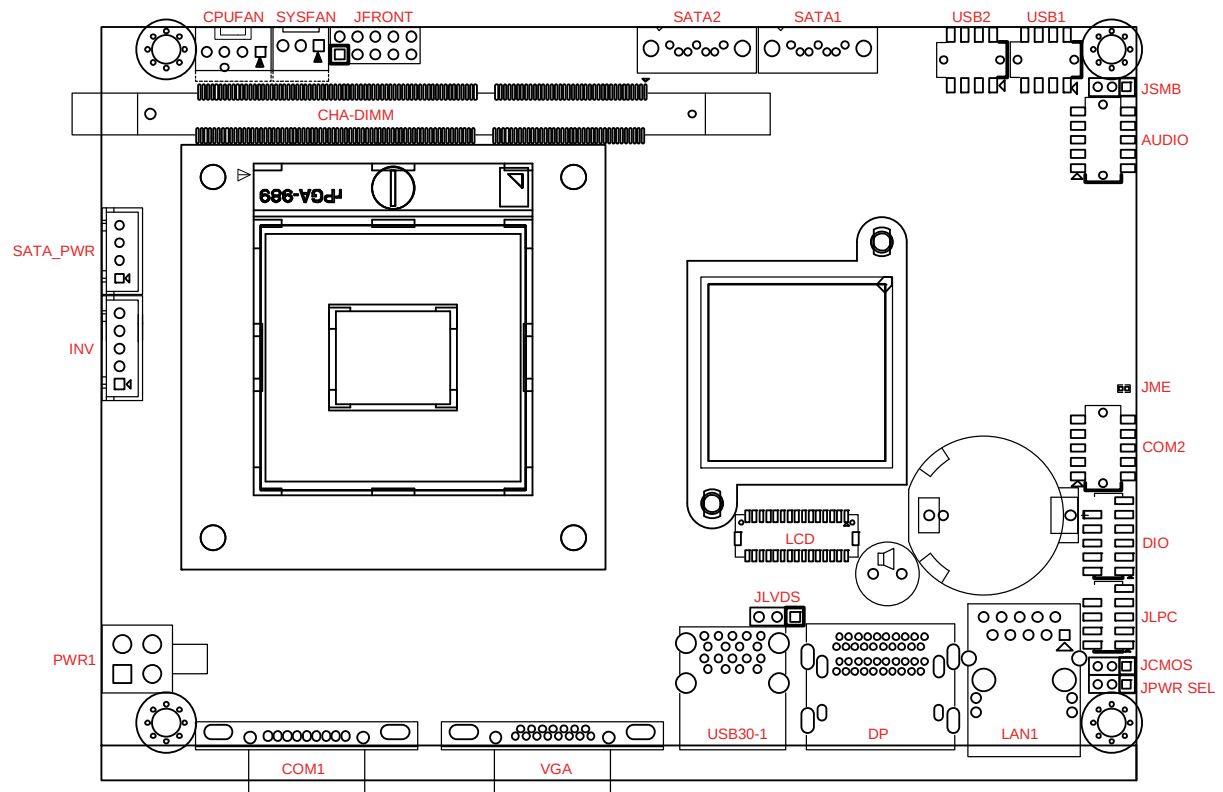


1.2 Features

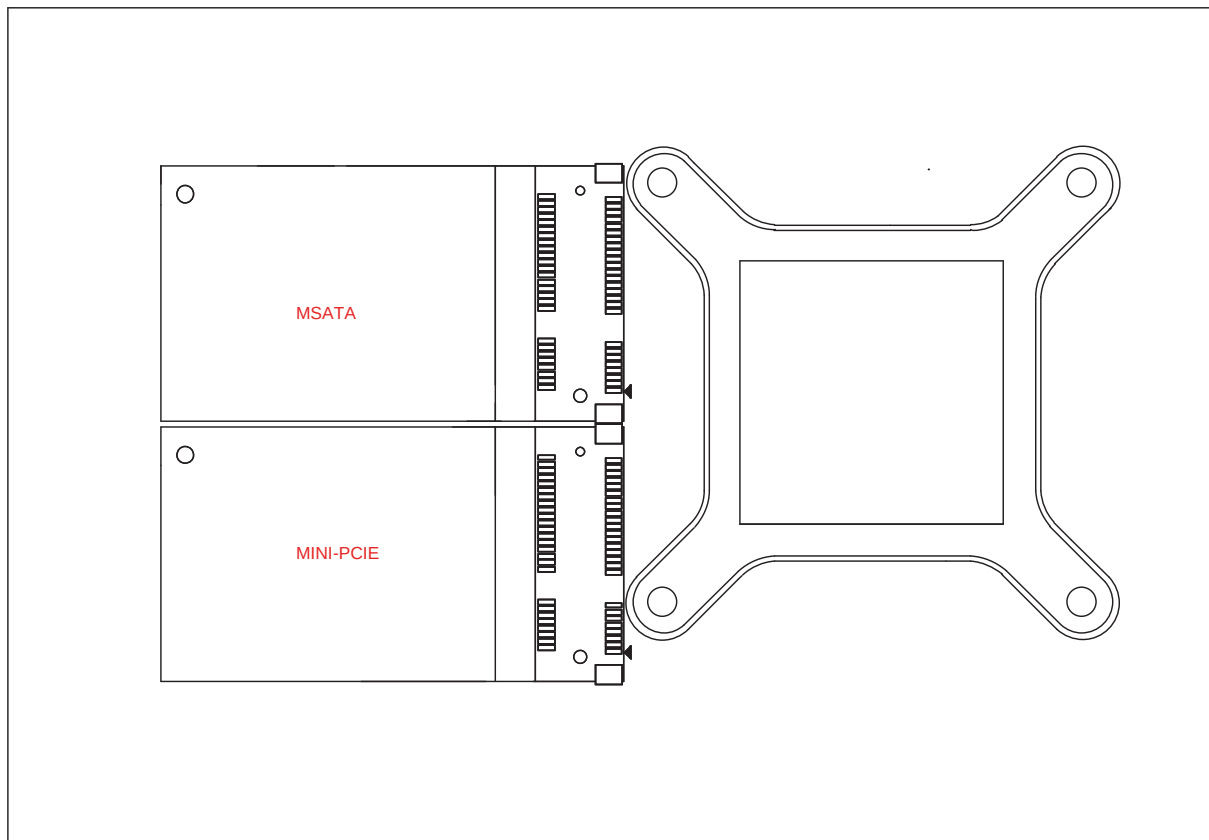
System Processor/ Chipsets	Processor	Intel® 3rd generation Core™ i7/ i5/ i3 processors (Ivy Bridge)
		Socket G2 (rPGA988B)
	Chipset	Intel® QM77
	BIOS	AMI
Memory	Technology	DDR3 1333/1600 MHz SDRAM
	Max. Capacity	Up to 8GB DDR3 DRAM
	Socket	1x DDR3 SO-DIMM
Display	Chipset	Intel QM77 integrated
	VRAM	Intel® Core™ integrated HD Graphics 4000 Shared system memory up to 2GB
	Resolution	Analog Display: Up to 2048 x 1536
	LVDS	24bit, dual channel
	LVDS Resolution	Digital LVDS: Up to 1920 x 1200
	Dual Display	CRT+LVDS, CRT+DP, DP+DP, DP+LVDS
	Triple Display	DP+DP+LVDS, DP+DP+CRT
Ethernet	Interface	10/100/1000 Mbps
	Controller	Intel® 82579LM
Audio	Interface	High Definition Audio
	Controller	Realtek ALC662 HD CODEC
SATA	Max. Data Transfer Rates	SATA III 600MB/s
	Port	2 x SATA III
Expansion Slot	mini PCIe	1
	m-SATA	1; full size
Onboard Pin-Header	USB 2.0	4
	SATA III	2

	LVDS 24bit	1
	COM	1 x RS232
	Audio	1(Line In, Line out, Mic in)
	Front Panel	1
	DIO	8 bit programmable digital input/output
Rear I/O	VGA	1
	COM	1
	LAN	1 x RJ45
	DP	2
	USB 3.0	2
Power	DC 12V Input	1
Watchdog Timer	Interval	Programmable 1~255 sec./min.
	Output	System reset
Environment *Note1	Operating Temp.	-5°C~60°C (23°F~140°F)
	Storage Temp.	-20°C~80°C (-68°F~176°F)
	Relative Humidity	0%~ 95% (non-condensing)
Form Factor	Dimension (L*W)	146mm x 102mm (5.75" x 4.01")

1.3 PCB Layout

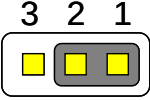
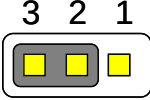


Bottom View

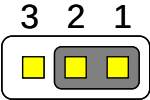
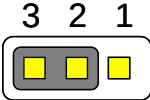


1.4 Jumper Setting

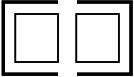
JCMOS: CMOS Clear

Pin No.	1-2	2-3
Function	Normal Operation (Default)	Clear CMOS Contents
Jumper Setting		

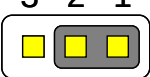
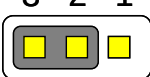
JLVDS: LCD Power (+3.3V/+5V) Select

Pin No.	1-2	2-3
Function	LCD Power +3.3V (Default)	LCD Power +5V
Jumper Setting		

JME: ME Clear

PAD	PAD Open	PAD Short
Function	Normal Operation (Default)	Clear ME Contents
Setting		

JPWR_SEL: AT/ATX Mode Select

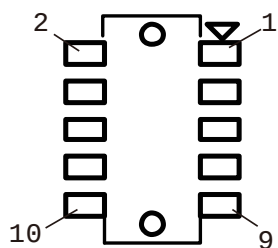
Pin No.	1-2	2-3
Function	AT Mode	ATX Mode (Default)
Jumper Setting		

1.5 Connector Function List

Connector	Function	Note
AUDIO	Line-In/MIC-In/Line-Out with Pin-header	
CHA-DIMM	DDR3 SO-DIMM connector	
COM1	Serial port connector	
COM2	Serial port connector with pin-header	
CPUFAN	CPUFAN 4-pin connector	
DIO	Digital input/output with pin-header	
DP	Display port connector	
INV	LCD inverter with box-header	
JFRONT	Front panel with pin-header	
JLPC	Reserved for debug	
JSMB	SMBUS with Pin-header	
LAN1	RJ45 connector	
LCD	LVDS connector	
MINI-PCIE	Mini PCI express connector (Full)	
MSATA	mSATA connector (Full)	
PWR1	ATX 2x2 connector	
SATA1,2	SATA3.0 connector	
SATA_PWR	SATA power with box-header	
SYSFAN	System FAN connector	
USB1,2	USB2.0 with pin-header	
USB30-1	USB3.0 connector	
VGA	VGA connector	

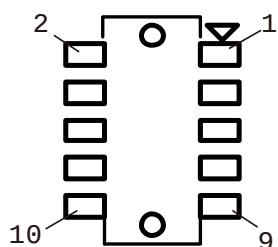
1.6 Internal Connector Pin Define

AUDIO: Audio with Pin-header (2.0mm)

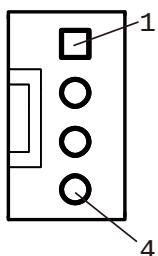


Pin No.	Signal	Pin No.	Signal
1	Line-in Right	2	Line-in Left
3	Line-in Jack Detect	4	MIC Jack Detect
5	MIC-in Right	6	MIC-in Left
7	Line-out Jack Detect	8	Audio Ground
9	Line-out Right	10	Line-out Left

COM2: Serial Port with Pin-header (2.0mm)

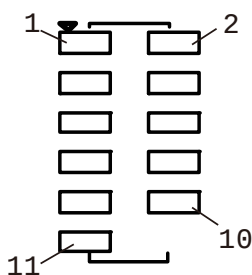


Pin No.	Signal	Pin No.	Signal
1	DCD	2	DSR
3	RXD	4	RTS
5	TXD	6	CTS
7	DTR	8	RI#
9	Ground	10	+NC



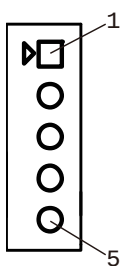
CPUFAN: 4Pin FAN connector

Pin No.	Signal
1	Ground
2	Fan Power (+12V)
3	Speed Sense
4	Control



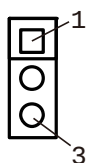
DIO: Digital I/O with Pin-header (2.54mm)

Pin No.	Signal	Pin No.	Signal
1	DIO-out4	2	DIO-in0
3	DIO-out5	4	DIO-in1
5	DIO-out6	6	DIO-in2
7	DIO-out7	8	DIO-in3
9	+12V	10	+5V
11	Ground	12	NC



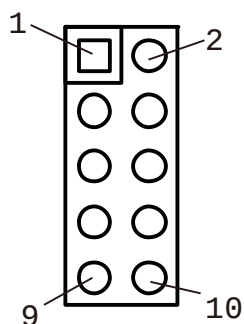
INV: Inverter with Box-header (2.50mm)

Pin No.	Signal
1	+12V
2	+5V
3	Ground
4	Inverter Brightness Adjust
5	Inverter Enable



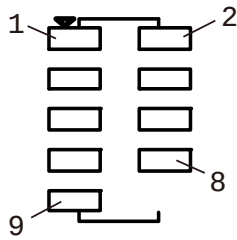
JSMB: SMBUS with Pin-header (2.0mm)

Pin No.	Signal
1	SMB_CLK
2	SMB Data
3	Ground



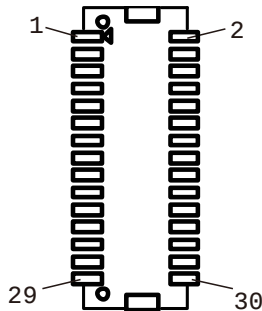
JFRONT: Front Panel with Pin-header (2.54mm)

Pin No.	Signal	Pin No.	Signal
1	+5V (470 Ohm) (Power LED+)	2	Power LED – (Ground)
3	+5V (470 Ohm) (HDD LED+)	4	HDD LED# (HDD LED-)
5	5VSB (470 Ohm) (Suspend LED+)	6	Suspend LED# (Suspend LED-)
7	Reset Switch +	8	Reset Switch – (Ground)
9	Power Switch +	10	Power Switch – (Ground)



JLPC: Debug Port with Pin-header (2.0mm)

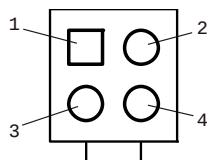
Pin No.	Signal	Pin No.	Signal
1	LAD0	2	LPC Reset#
3	LAD1	4	LFRAME#
5	LAD2	6	+3.3V
7	LAD3	8	Ground
9	LPC33MHz	10	NC



LCD: LVDS Panel Signal with Box-header (1.0mm)

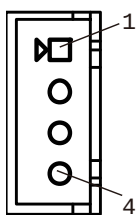
Pin No.	Signal	Pin No.	Signal
1	Ground	2	Ground
3	LVDSA_DATA3+	4	LVDSA_DATA3-
5	LVDSA_CLK+	6	LVDSA_CLK-
7	LVDSA_DATA2+	8	LVDSA_DATA2-
9	LVDSA_DATA1+	10	LVDSA_DATA1-
11	LVDSA_DATA0+	12	LVDSA_DATA0-
13	Ground	14	Ground
15	LVDSB_DATA3+	16	LVDSB_DATA3-
17	LVDSB_CLK+	18	LVDSB_CLK-
19	LVDSB_DATA2+	20	LVDSB_DATA2-
21	LVDSB_DATA1+	22	LVDSB_DATA1-
23	LVDSB_DATA0+	24	LVDSB_DATA0-
25	Ground	26	Ground
27	LVDS Power	28	LVDS Power
29	LVDS Power	30	LVDS Power

Note1: LVDS Power = +12V, +5V or +3.3V (Default)



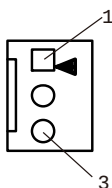
PWR1: 2x2 +12V Input

Pin No.	Signal	Pin No.	Signal
1	Ground	2	Ground
3	+12V	4	+12V



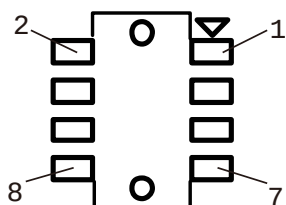
SATA PWR: SATA Power with Box-header (2.50mm)

Pin No.	Signal
1	+5V
2	Ground
3	Ground
4	+12V



SYSFAN: System FAN 3 Pin connector

Pin No.	Signal
1	Ground
2	Fan Power (+12V)
3	Speed Sense



USB1, 2: USB with Pin-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	USB Power (+5V)	2	USB Power (+5V)
3	USB DATA-	4	USB DATA-
5	USB DATA+	6	USB DATA+
7	Ground	8	Ground

Chapter 2 BIOS Setup

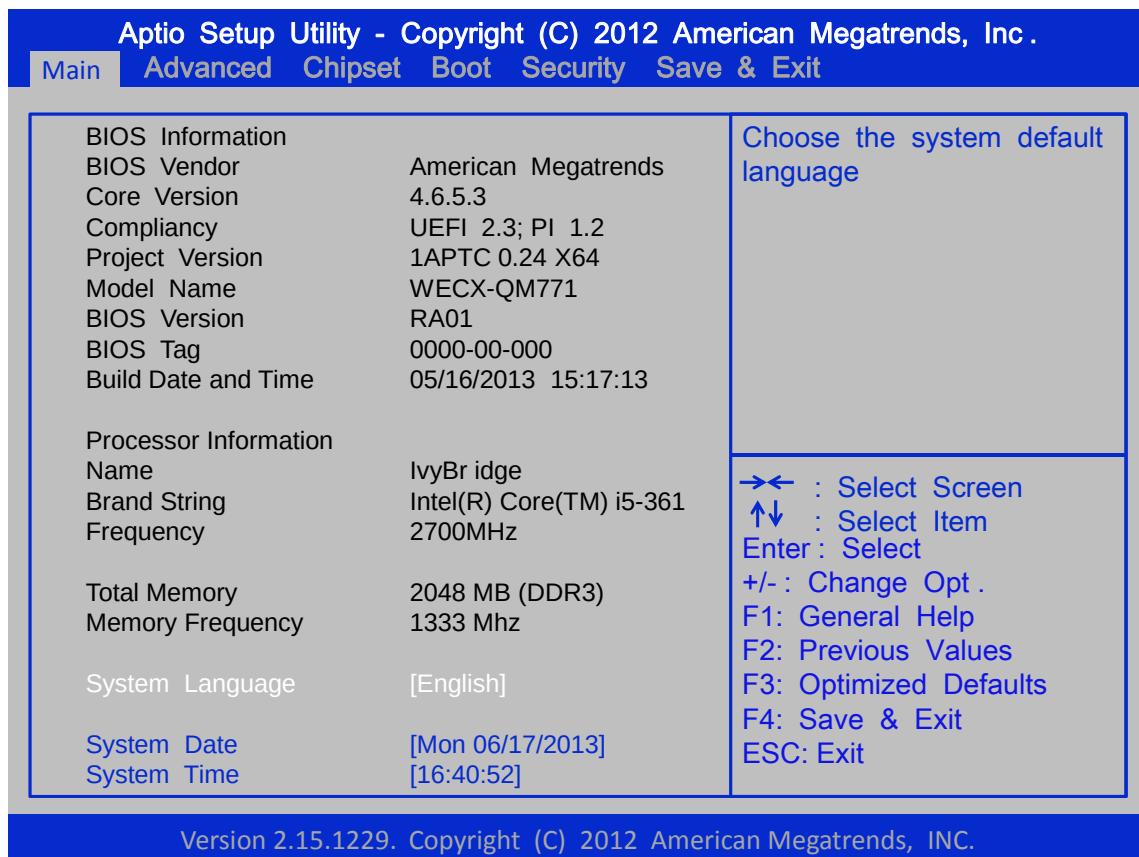
This chapter introduces BIOS setup information.

Power on or reboot the system board, when screen appears message as “Press DEL to enter SETUP“. Press <DEL> key to run BIOS SETUP Utility.

Note: The BIOS configuration for reference only, it may subject to change without prior notice.

2.1 Main Menu

Please use arrow keys to select item, then press <Enter> key to accept or enter the sub-menu.



☐ Date

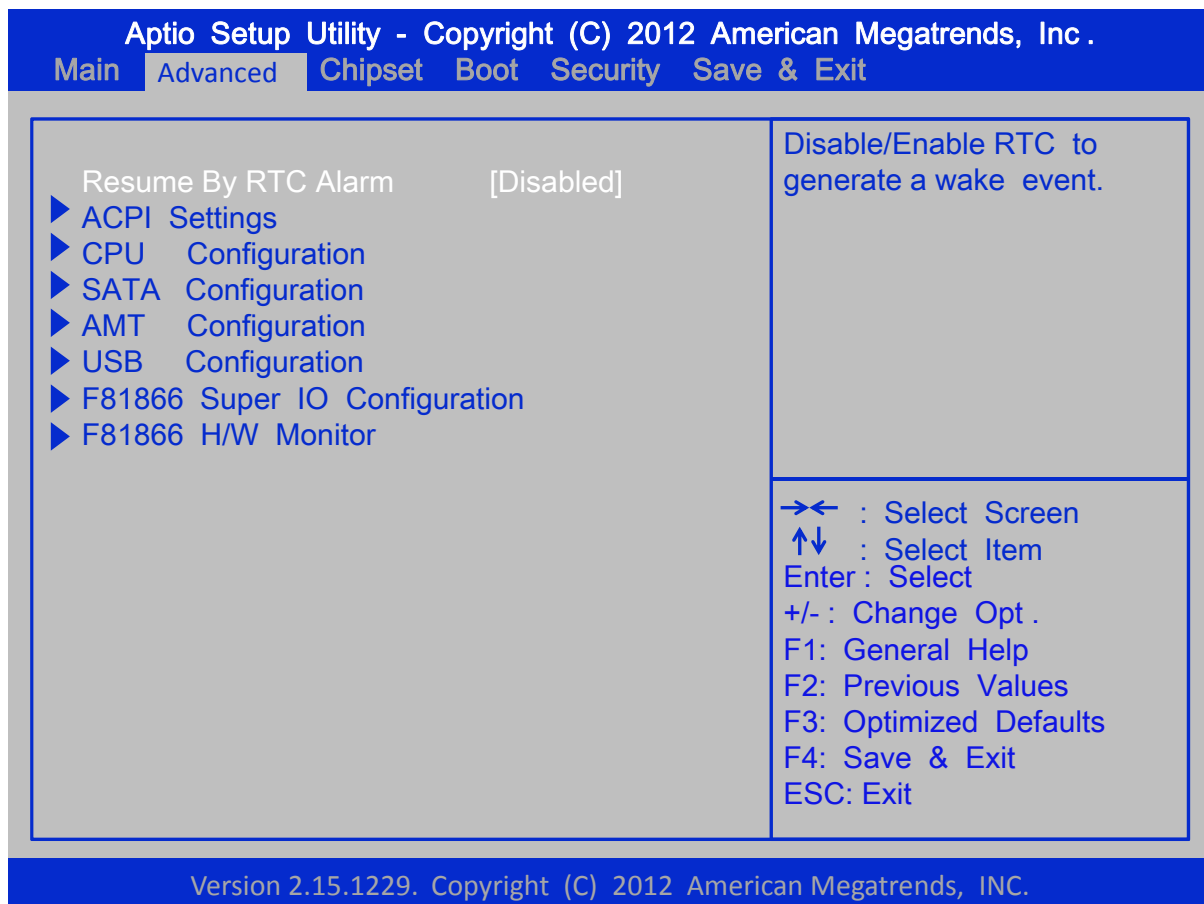
Set system date.

☐ Time

Set system time.

2.2 Advanced Menu

This section allows you to configure CPU and other system devices for basic operation through the following sub-menu.

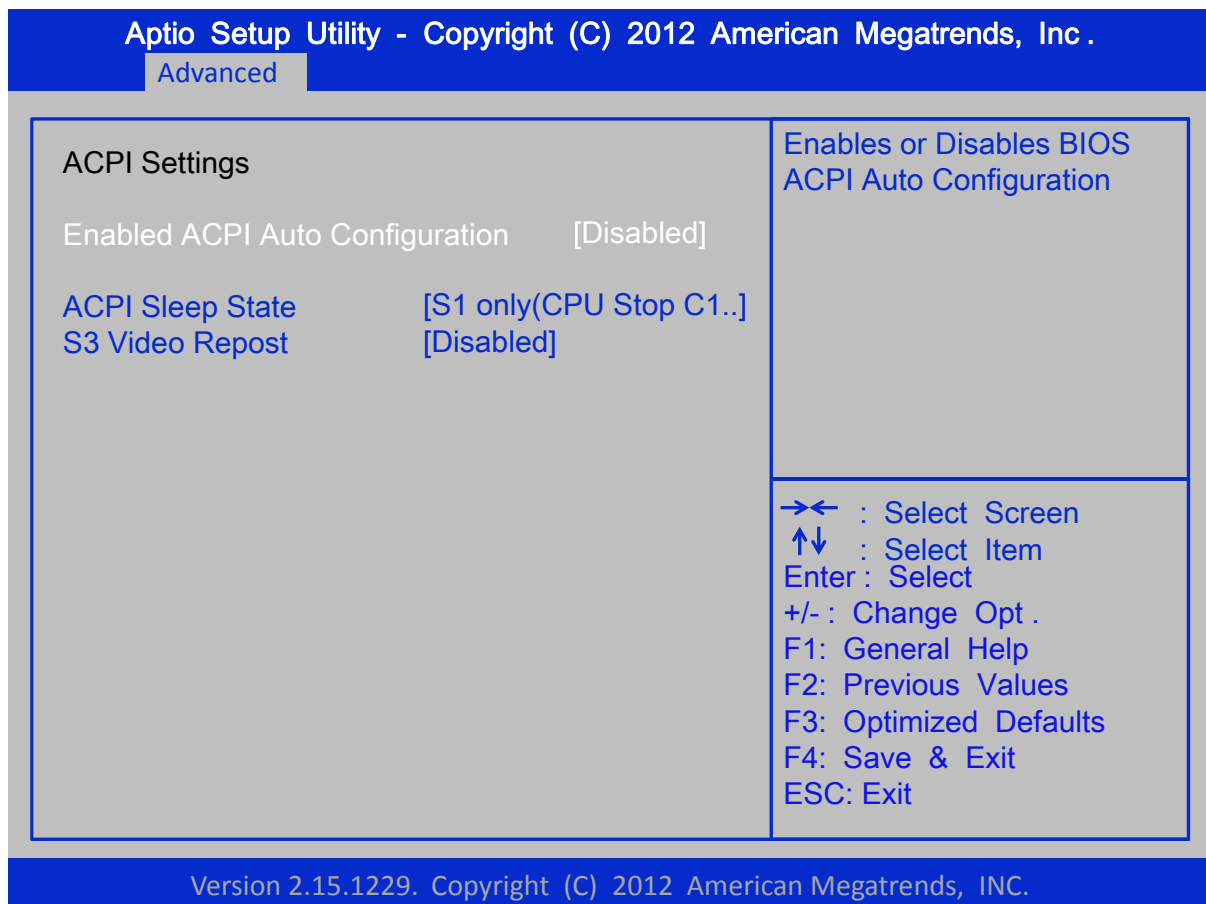


☐ Resume By RTC Alarm

The item is used to enable/disable RTC Alarm to generate a wake up.

Choices: Disabled, Enabled.

2.3 ACPI Setting



☐ Enabled ACPI Auto Configuration

The item allows users to enable or disable the ACPI Auto Configuration.

Choices: Disabled, Enabled.

☐ ACPI Sleep State

Select the highest ACPI sleep state the system will enter, when SUSPEND button is pressed.

☐ S3 Video Repost

The item runs the video option ROM on a boot from the S3 state again.

Choices: Disabled, Enabled.

2.4 CPU Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Advanced	
CPU Configuration Intel(R) Core(TM) i5-3610ME CPU @ 2.70GHz CPU Signature 306a9 Microcode Patch 13 Max CPU Speed 2700 MHz Min CPU Speed 1200 MHz CPU Speed 2700 MHz Processor Cores 2 Intel HT Technology Supported Intel VT-X Technology Supported Intel SMX Technology Supported 64-bit Supported L1 Date Cache 32 KB x 4 L2 Code Cache 32 KB x 4 L2 Cache 256 KB x 4 L3 Cache 3072 KB	
→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

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2.5 SATA Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
SATA Controller(s)	[Enabled]	Enable or disable SATA Device
SATA Mode Selection	[IDE]	
IDE Legacy / Native Mode Selection	[Native]	
Serial ATA Port 0	Empty	→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Software Preserve	Unknown	
Serial ATA Port 1	Empty	
Software Preserve	Unknown	
Serial ATA Port 2	Empty	
Software Preserve	Unknown	

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☐ SATA Controller

The item allows users to enable or disable SATA devices.

Choices: Disabled, Enabled.

☐ SATA Mode Selection

The item allows users to disable or set the chip serial SATA controller mode.

Choices: Disable, IDE, Raid, AHCI.

☐ IDE Legacy/Native Mode Selection

The item enables support for either legacy or native mode.

Choices: Native, Legacy.

2.6 AMT Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
Intel AMT	[Enabled]	Enable/Disable Intel (R) Active Management Technology BIOS Extension. Note : iAMT H/W is always enabled. This option just controls the BIOS extension execution. If enabled, this requires Additional firmware in the SPI device
BIOS Hotkey Pressed	[Disabled]	
MEBx Selection screen	[Disabled]	
Hide Un-Configure ME Confirmation	[Disabled]	
MEBx Debug Message Output	[Disabled]	
Un-Configure ME	[Disabled]	
Amt Wait Timer	0	
Disable ME	[Enabled]	
ASF	[Enabled]	
Activate Remote Assistance Process	[Disabled]	
USB Configure	[Enabled]	→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
PET Progress	[Enabled]	
AMT CIRA Timeout	0	

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☐ Intel AMT

The option controls the BIOS extension execution. If enabled, this requires additional firmware in the SPI device.

Choices: Disabled, Enabled.

☐ BIOS Hotkey Pressed

If the setting is default, the option is "Disabled".

Choices: Disabled, Enabled.

☐ MEBx Selection screen

The item allows users to enable or disable MEBx selection screen.

Choices: Disabled, Enabled.

☐ Hide Un-Configure ME Confirmation

The item allows users to hide un-configured ME without password confirmation prompt.

Choices: Disabled, Enabled.

☐ **MEBx Debug Message Output**

The item allows users to enable or disable MEBx debug message.

Choices: Disabled, Enabled.

☐ **Un- Configure ME**

If the setting is default, the option is "Disabled".

Choices: Disabled, Enabled.

☐ **Amt Wait Timer**

The item is set to wait time to enter AMT to 0.

☐ **Disable ME**

The item temporarily sets the Management Engine to soft disable.

Choices: Disabled, Enabled.

☐ **ASF**

The item enables or disables Alert Specification Format.

Choices: Disabled, Enabled.

☐ **Activate Remote Assistance Process**

The item is for trigger CRT boot.

Choices: Disabled, Enabled.

☐ **USB Configure**

The item enables legacy USB support.

Choices: Disabled, Enabled.

☐ **PET Progress**

The item allows users to enable or disable PET events progress to receive PET events or not.

Choices: Disabled, Enabled.

☐ **AMT CIRA Timeout**

Set the timeout for MPS connection to be established

2.7 USB Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Advanced	
USB Configuration USB Devices 1 Keyboard, 2 Hubs Legacy USB Support [Enabled] USB3.0 Support [Enabled] XHCI Hand-off [Enabled] EHCI Hand-off [Disabled]	Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connect. DISABLE option will keep USB devices available only for EFI applications.
USB hardware delays and time-outs: USB transfer time-out [20 sec] Device reset time-out [20 sec] Device power-up delay [Auto]	→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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☐ Legacy USB Support

The item allows users to enable or disable legacy support about USB devices.

Choices: Disabled, Enabled, Auto.

☐ USB3.0 Support

The item allows users to enable or disable USB3.0 controller support.

☐ XHCI Hand-pff

The item is a workaround for OSes without XHCI hand-off support.

Choices: Disabled, Enabled.

☐ EHCI Hand-pff

The item is a workaround for OSes without EHCI hand-off support.

Choices: Disabled, Enabled

☐ **USB Transfer time-out**

The item is for the time-out value for Control, Bulk, and Interrupt transfers.

☐ **Device reset time-out**

The item is for USB mass storage device start unit command time-out.

☐ **Device power-up delay**

The item is for maximum time and the device will take before it properly reports itself to the host controller.

2.8 Super IO Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Advanced	
F81866 Super IO Configuration	
F81866 Super IO Chip	F81866
▶ Serial Port 0 Configuration	
▶ Serial Port 1 Configuration	
ERP Wake up	[Enabled]
Watch dog timer	[Disabled]
Watch dog timer counter	10
Set Parameters of Serial Port 0 (COMA)	
→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	
Version 2.15.1229. Copyright (C) 2012 American Megatrends, INC.	

☐ ERP Wake Up

Choices: Disabled, Enabled

☐ Watch Dog Timer

This option will determine watch dog timer.

2.9 Serial Port 0 Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Advanced	
Serial Port 0 Configuration	
Serial Port	[Enabled]
Device Settings	IO=3F8h; IRQ=4;
Change Settings	[Auto]
→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

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☐ **Serial Port**

Use this option to enable or disable the serial port.

☐ **Device Settings**

Use this option to show the serial port IO port address and interrupt address.

☐ **Change Settings**

Use this option to change COM address as required.

2.10 Serial Port 1 Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Advanced	
Serial Port 1 Configuration	
Serial Port	[Enabled]
Device Settings	IO=2F8h; IRQ=3;
Change Settings	[Auto]
Enable or Disable Serial Port (COM)	
 →← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	

Version 2.15.1229. Copyright (C) 2012 American Megatrends, INC.

☐ **Serial Port**

Use this option to enable or disable the serial port.

☐ **Device Settings**

Use this option to show the serial port, IO port address, and interrupt address.

☐ **Change Settings**

Use this option to change COM address as required.

2.11 Pc Health Setting

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
Pc Health Status		Enable or Disable Smart Fan
Smart Fan Function [Enabled]		
▶ Smart Fan Mode Configuration		
CPU Temp	: +38 C	
SYS Temp	: +39 C	
CPU FAN Speed	: 6849 RPM	
SYS FAN Speed	: N/A	
CPU VCore	: +0.880 V	
+V5S	: +5.087 V	
+V5	: +5.129 V	
+V12	: +11.264 V	
VS5V	: +4.960 V	
VCC3V	: +3.392 V	
VS3V	: +3.424 V	
VBAT	: +2.944 V	
		→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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☐ Smart Fan Function

The item allows users to enable or disable the System smart fan feature.

☐ Smart Fan Mode Configuration

Set the smart fan mode.

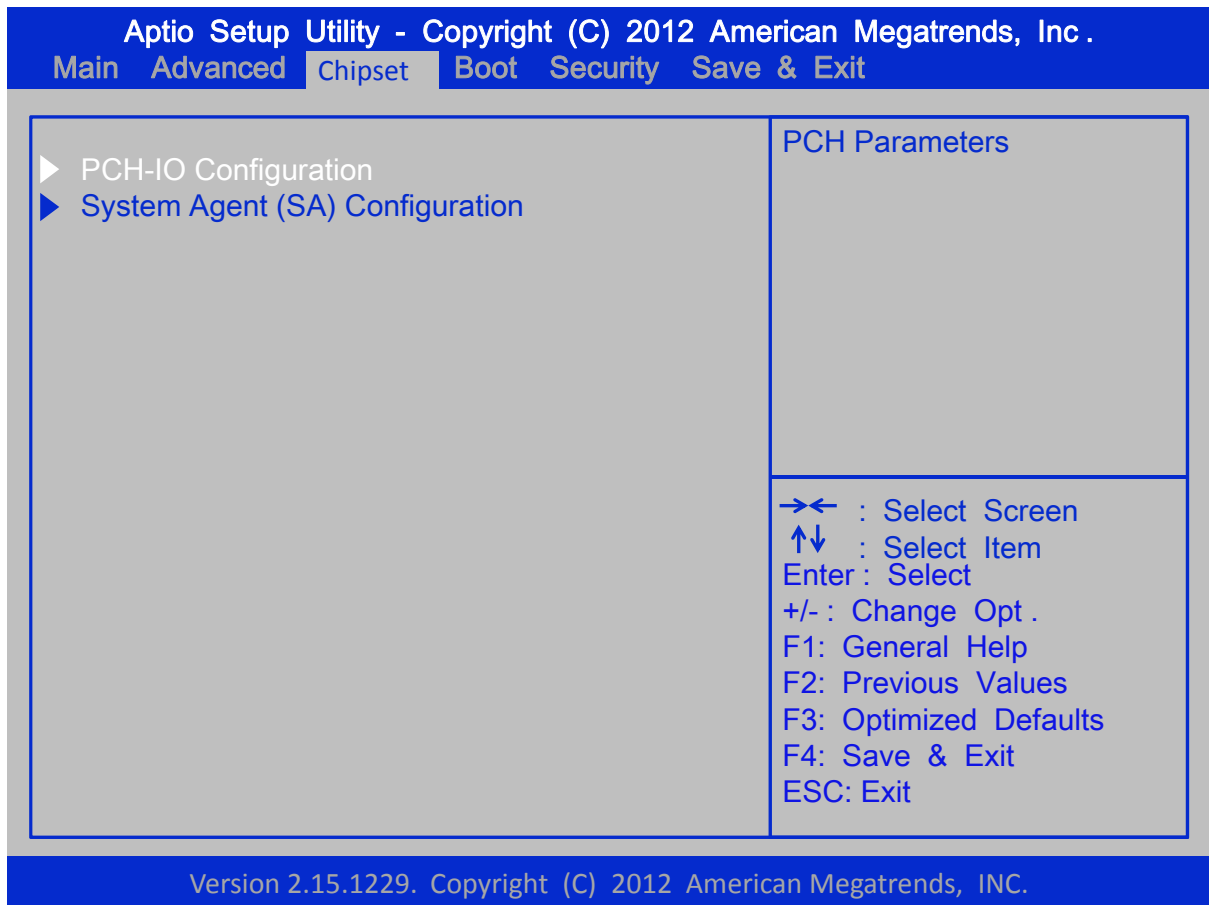
2.12 Smart Fan Mode Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Advanced		
Smart Fan Mode Configuration		Smart Fan Mode Select
CPU Fan Smart Fan Control [Auto Duty-Cycle Mode]		
Temperature 1	60	
Temperature 2	50	
Temperature 3	40	
Temperature 4	30	
Duty Cycle 1	85	
Duty Cycle 2	70	
Duty Cycle 3	60	
Duty Cycle 4	50	
SYS FAN Smart Fan Control [Auto Duty-Cycle Mode]		
Temperature 1	60	
Temperature 2	50	
Temperature 3	40	
Temperature 4	30	
Duty Cycle 1	85	
Duty Cycle 2	70	
Duty Cycle 3	60	
Duty Cycle 4	50	
		→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
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☐ CPU Fan Smart Fan Control

The item enables or disables the smart fan feature.

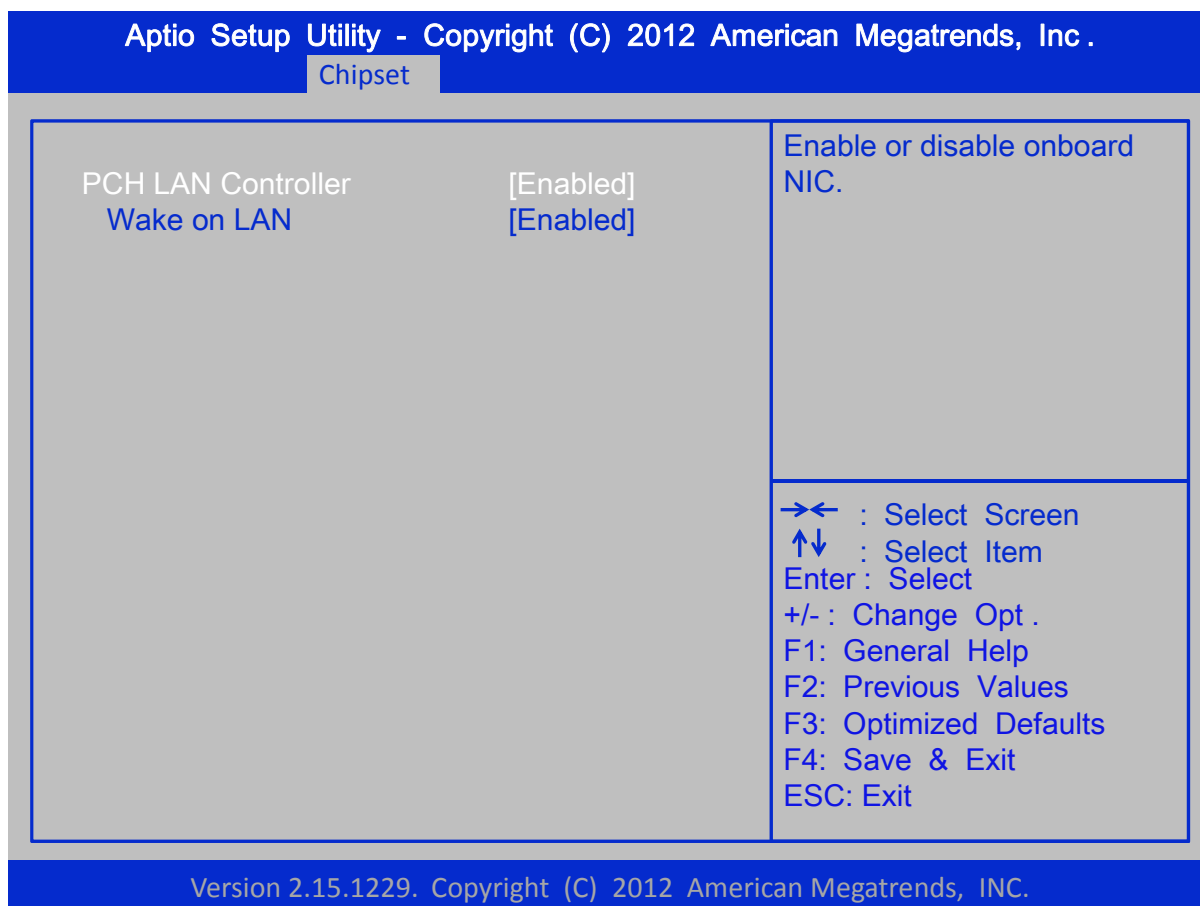
2.13 Chipset



☐ **PCH-IO Configuration**

☐ **System Agent(SA) Configuration**

2.14 LAN Setting



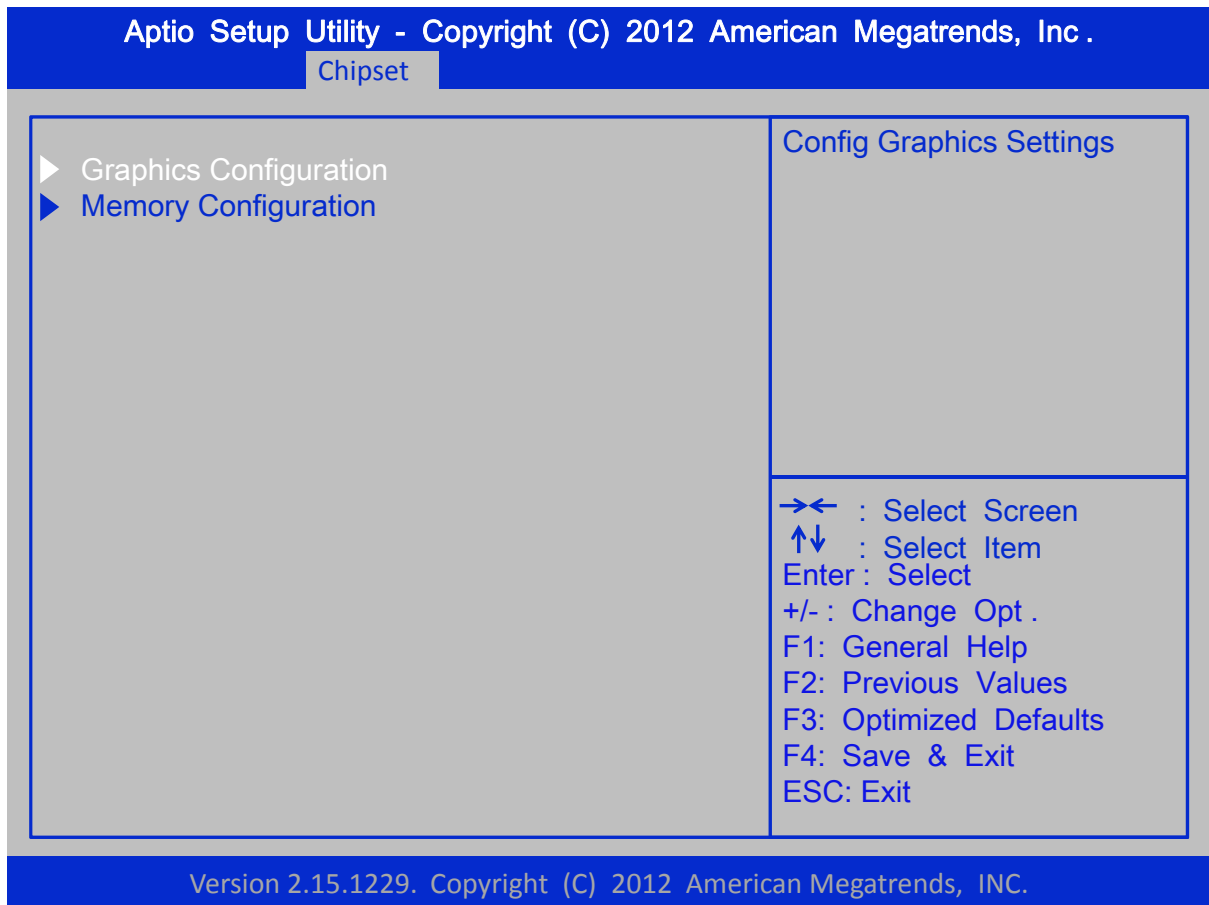
☐ **PCH LAN Controller**

The item enables or disables the onboard LAN function.

☐ **Wake on LAN**

The item enables or disables the sleep mode.

2.15 System Agent Configuration



☐ **Graphics Configuration**

☐ **Memory Configuration**

2.16 Graphics Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Chipset		
Graphics Configuration		Graphics turbo IMON current Values supported (14-31)
IGFX VBIOS Version	2137	
IGfx Frequency	350 MHz	
Graphics Turbo IMON Current	31	
Primary Display	[Auto]	→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Internal Graphics	[Auto]	
GTT Size	[2MB]	
Aperture Size	[256MB]	
DVMT Pre-Allocated	[64M]	
DVMT Total Gfx Mem	[256M]	
Gfx Low Power Mode	[Enabled]	
Graphics Performance Analyzers	[Disable]	
Primary IGFX Boot Display	[CRT]	
Secondary IGFX Boot Display	[Disabled]	
LCD Panel Type	[1024x768 A LVDS]	
Active LFP	[Int-LVDS]	
Panel Color Depth	[18 Bit]	
Backlight Active Mode	[DC Mode]	
Backlight Voltage Leve1	[+3.3V]	
Backlight Control Leve1	[Step 10]	

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☐ Primary Display

This item allows users to select which graphics controller to use as the primary boot device.

☐ Intel Graphics

This item allows users to enable or disable IGD.

☐ GTT Size

This item allows users to select GTT size.

☐ Aperture Size

This item allows users to select aperture size.

☐ DVMT Pre-Allocated

This item allows users to select DVMT pre-allocated memory size.

☐ **DVMT Total Gfx Mem**

This item allows users to select DVMT total memory size.

☐ **Gfx Low Power Mode**

This item is applicable for SFF only.

☐ **Graphics Performance Analyzers**

This item enables or disables the Intel Graphics Performance Analyzer counters.

☐ **Primary IGFX Boot Display**

This item allows users to select the video device which will be activated during post.

☐ **Secondary IGFX Boot Display**

Choose secondary display device.

☐ **LCD Panel Type**

This item allows users to select appropriate resolution and color depth for LCD panel.

☐ **Active LFP**

Choose the Active LFP configuration.

☐ **Panel Color Depth**

The default setting is 18bit. The other option is 24bit.

☐ **Backlight Active Mode**

Choose Backlight Active Mode: PWN Mode or DC Mode.

☐ **Backlight Voltage Level1**

Choose Backlight Voltage Mode: +5.0V Level or +3.3V Level.

☐ **Backlight Control Level1**

This item is used to back light control setting.

2.17 Memory Information

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.	
Chipset	
Memory Information	
Memory Frequency	1333 Mhz
Total Memory	2048 MB (DDR3)
DIMM#0	2048 MB (DDR3)
CAS Latency (tCL)	9
Minimum delay time	
CAS to RAS (tRCDmin)	9
Row Precharge (tRPmin)	9
Active to precharge (tRASmin)	24
→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	
Version 2.15.1229. Copyright (C) 2012 American Megatrends, INC.	

2.18 Boot Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Main Advanced Chipset Boot Security Save & Exit		
Boot Configuration Setup Prompt Timeout 1 Bootup NumLock State [On] Quiet Boot [Disabled] Fast Boot [Disabled] CSM16 Module Version 07.69 GateA20 Active [Upon Request] Option ROM Messages [Force BIOS] INT19 Trap Response [Immediate] Boot Option Priorities ► CSM parameters		Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting. →← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.15.1229. Copyright (C) 2012 American Megatrends, INC.		

☐ Setup Prompt Timeout

This item allows user to change number of seconds to wait for setup activation key.

☐ Bootup NumLock State

This item allows user to select the Power-on state for Numlock.

☐ Quiet Boot

This item allows user to enable or disable Quite Boot option.

☐ Fast Boot

This item allows user to enable or disable boot with initialization of minimal set of devices required to launch active boot option.

☐ GateA20 Active

This item allows user to select upon request or always.

☐ **Option ROM Messages**

This item allows user to set display mode for option ROM.

☐ **INT19 Trap Response**

This item allows option ROMs to trap interrupt 19.

2.19 CSM Parameters

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.		
Boot		
Launch CSM	[Enabled]	This option controls if CSM Will be launched
Boot option filter	[UEFI and Legacy]	
Launch PXE OpROM policy	[Do not launch]	
Launch Storage OpROM policy	[Legacy only]	
Launch Video OpROM policy	[Legacy only]	
Other PCI device ROM priority [UEFI OpROM]		
		→← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.15.1229. Copyright (C) 2012 American Megatrends, INC.		

☐ **Launch CSM**

This item controls if CSM will be launched.

☐ **Boot option filter**

This item controls what devices system can boot.

☐ **Launch PXE OpROM policy**

This item controls the execution of UEFI and Legacy PXE OpROM.

☐ **Launch Storage OpROM priority**

This item controls the execution of UEFI and Legacy Storage OpROM.

☐ **Launch Video ROM policy**

This item controls the execution of UEFI and Legacy Video OpROM.

☐ **Other PCI device ROM priority**

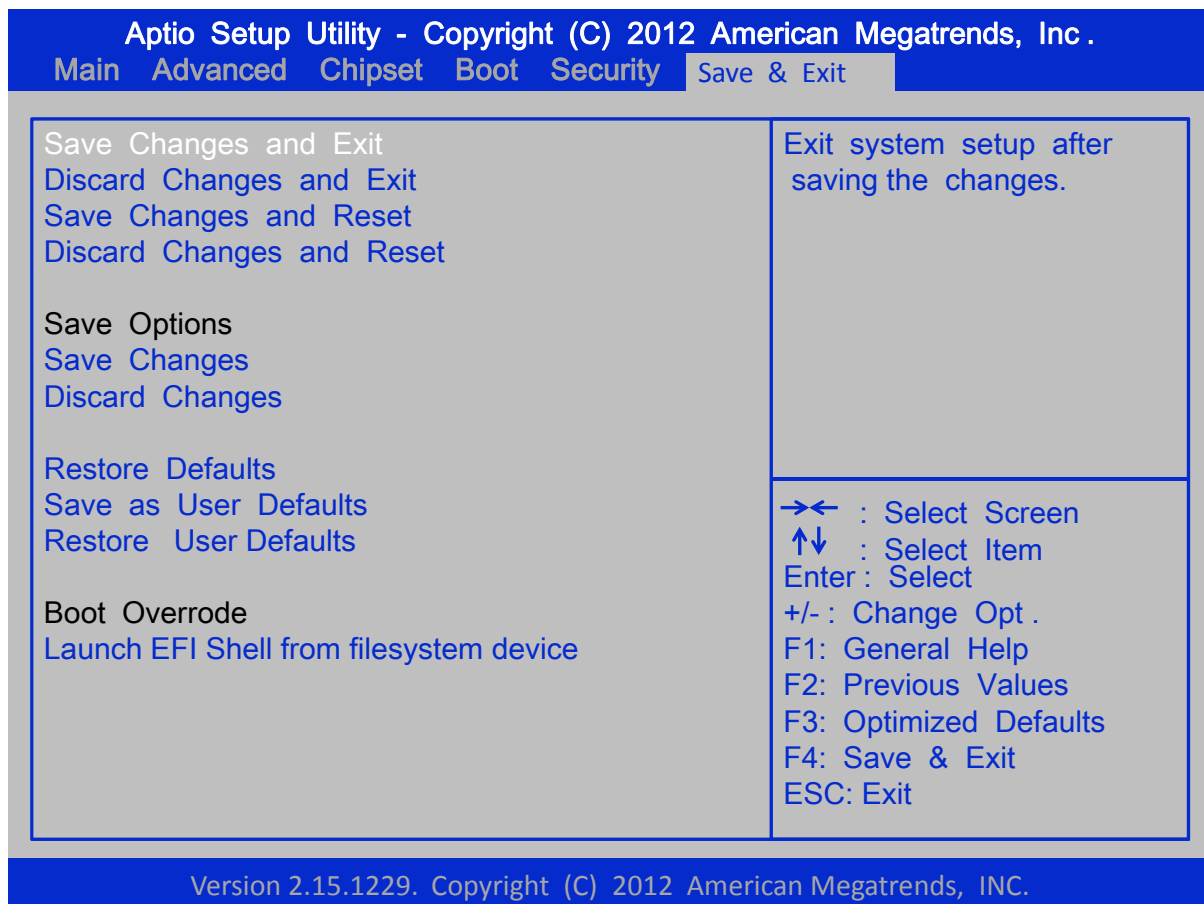
For PCI devices other than Network, Mass storage or Video defines which OpROM to launch.

2.20 Password Configuration

Aptio Setup Utility - Copyright (C) 2012 American Megatrends, Inc.					
Main	Advanced	Chipset	Boot	Security	Save & Exit
Password Description If ONLY the Administrator's password is set , then this only limits access to Setup and is only asked for when entering Setup. If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights. The password length must be in the following range: Minimum length 3 Maximum length 20 Administrator Password User Password System Mode state Setup Secure Boot state Disabled Secure Boot [Enabled] Secure Boot Mode [Standard] HDD Security Configuration :		Set Administrator Password →← : Select Screen ↑↓ : Select Item Enter : Select +/- : Change Opt . F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit			

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2.21 Save Changes and Exit



Chapter 3 Drivers Installation

This chapter introduces driver installation information.

Please insert the utility CD to CD-ROM drive, the install menu will appear automatically, if the install menu do not list suitable driver of Operate System or appear automatically, please select corresponding driver of utility CD to install.

The Windows XP driver installation steps are as below.

3.1 Intel Chipset Device Software

Step 1. Click “Next” to continue



Step 2. Read the License Agreement and click “Yes” to continue.



Step 3. Click “Next” to continue.



Step 4. Click “Next” to continue.



Step 5. Click “Finish” to complete setup.



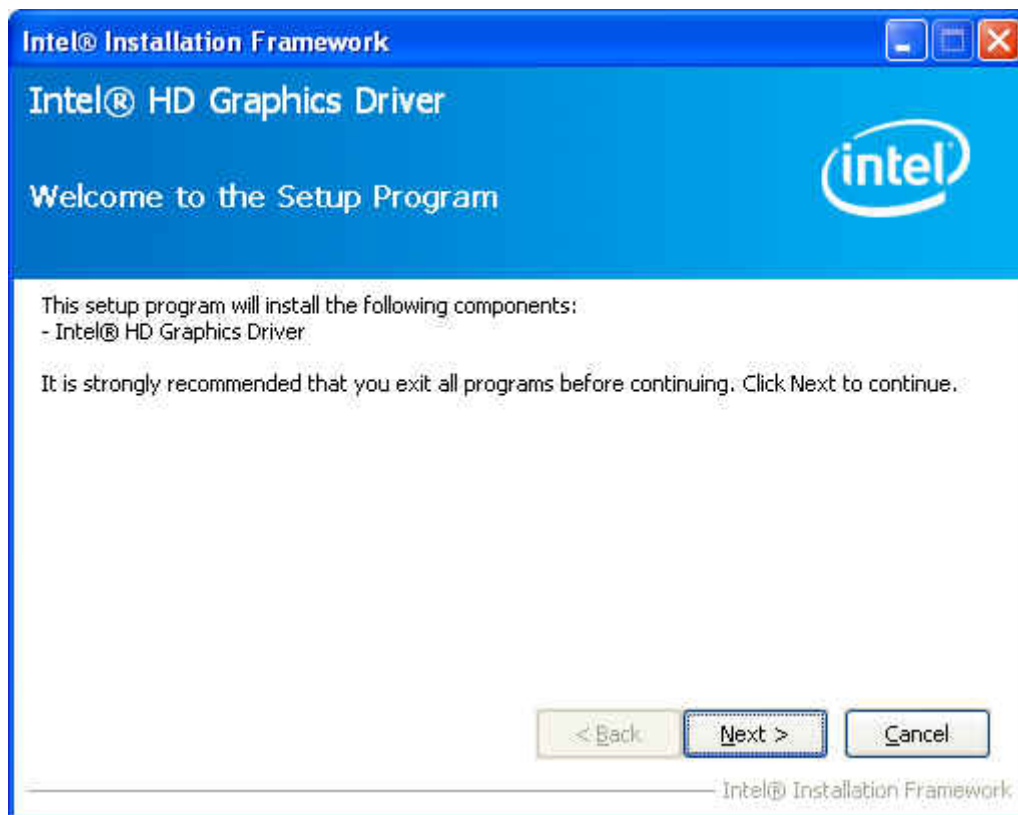
3.2 Net Framework

Step 1. Click “Yes” to continue.



3.3 Intel Graphic Media Accelerator Driver

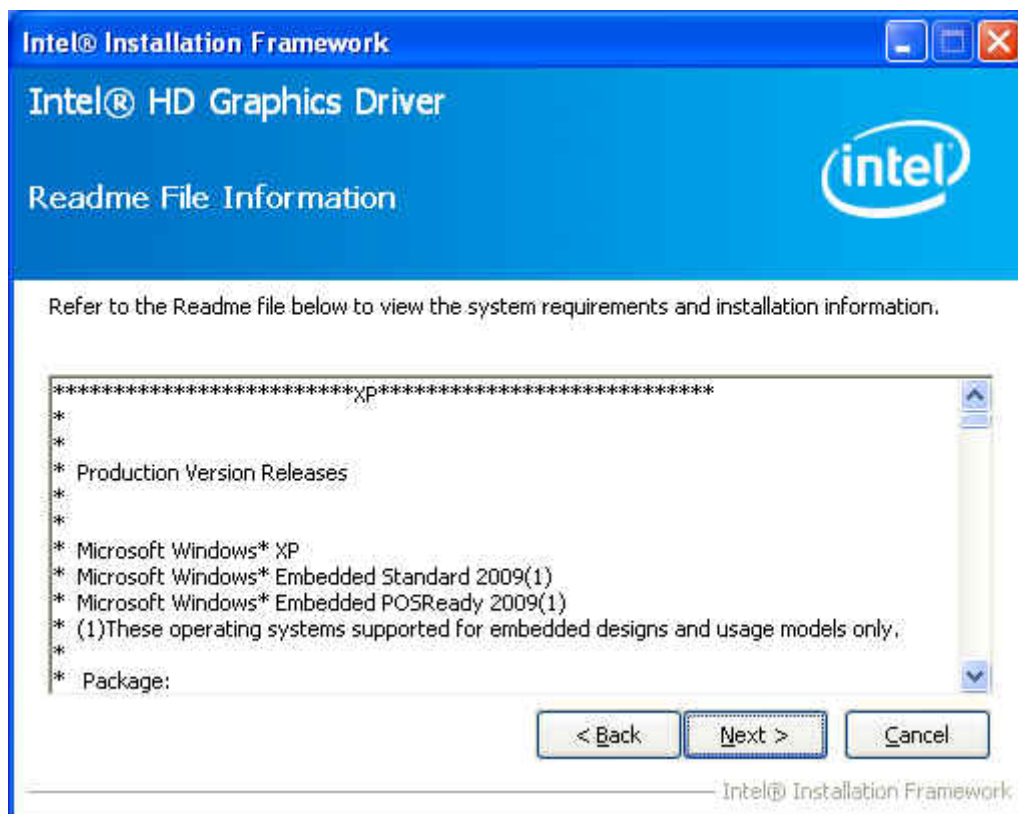
Step 1. Click “Next” to continue.



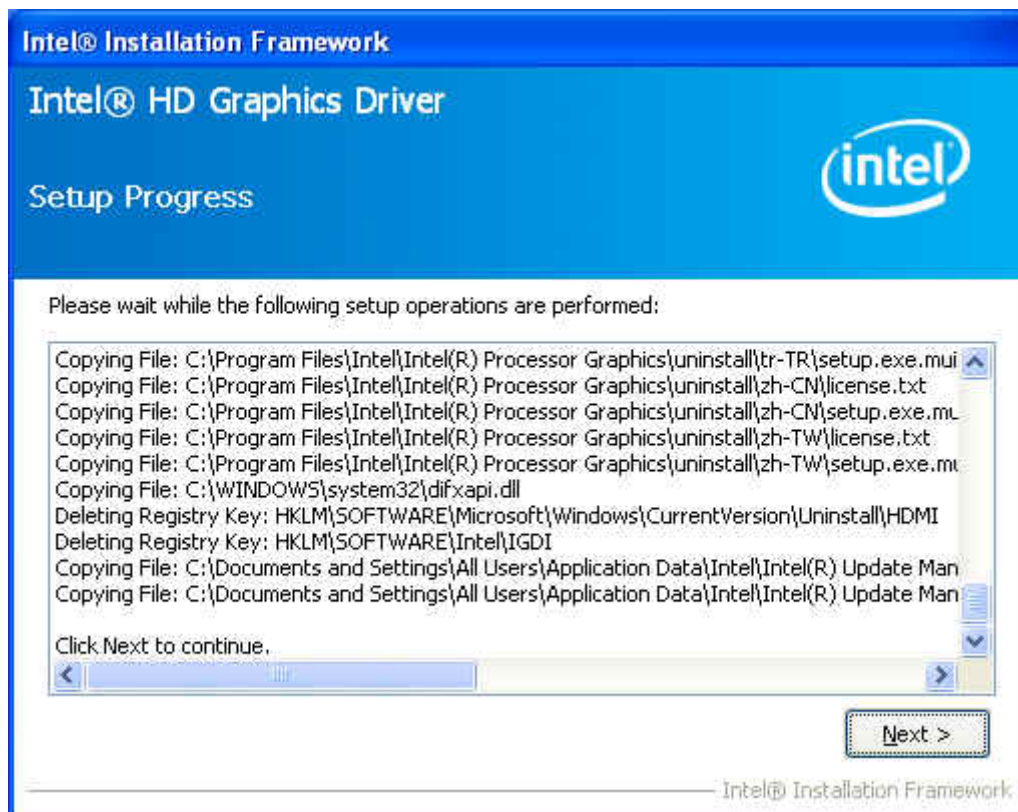
Step 2. Click “No” to continue.



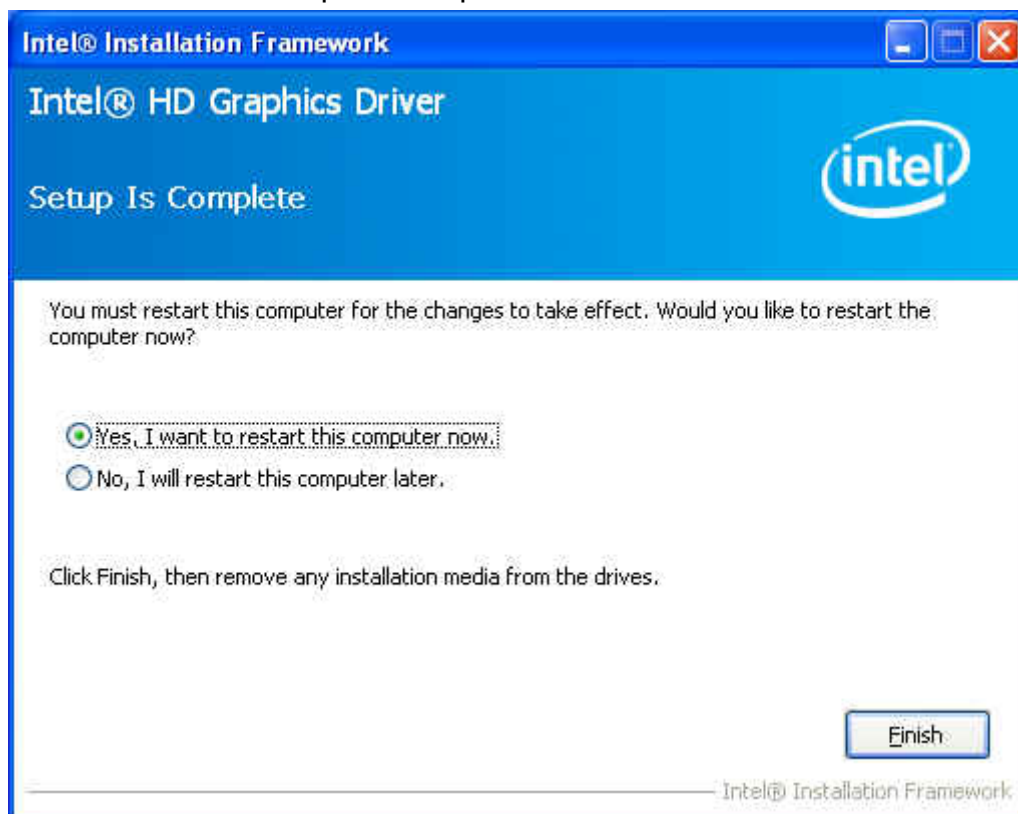
Step 3. Click “Next” to continue.



Step 4. Click “Next” to continue.



Step 5. Click “Finish” to complete setup.



3.4 LAN Driver

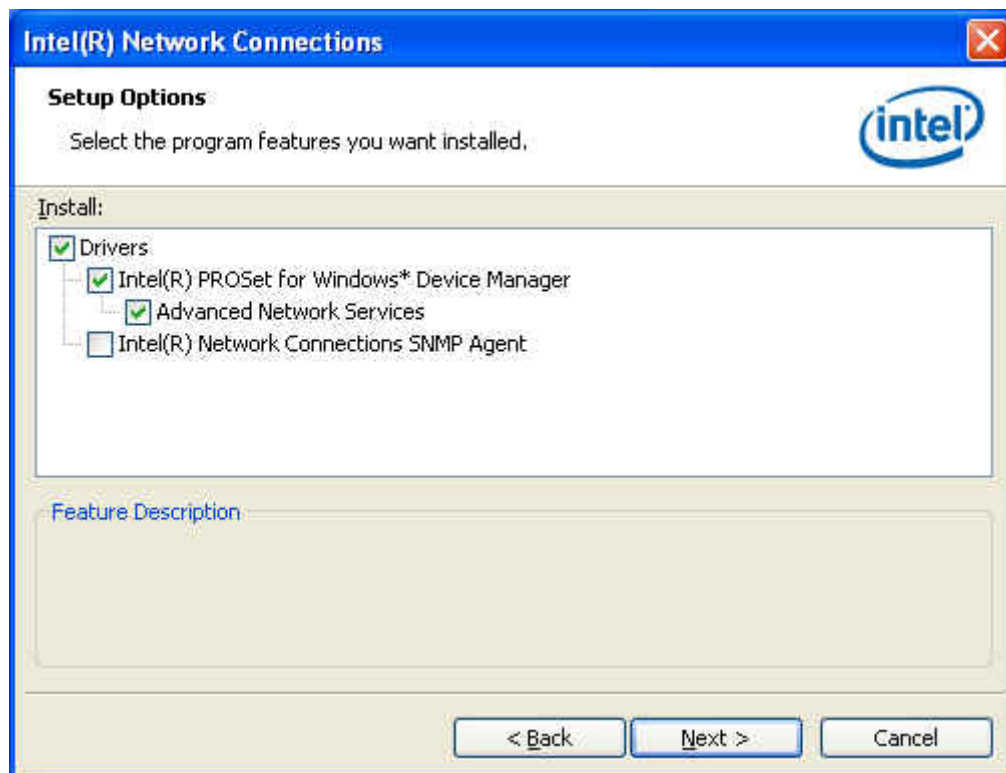
Step 1. Click “Next” to continue.



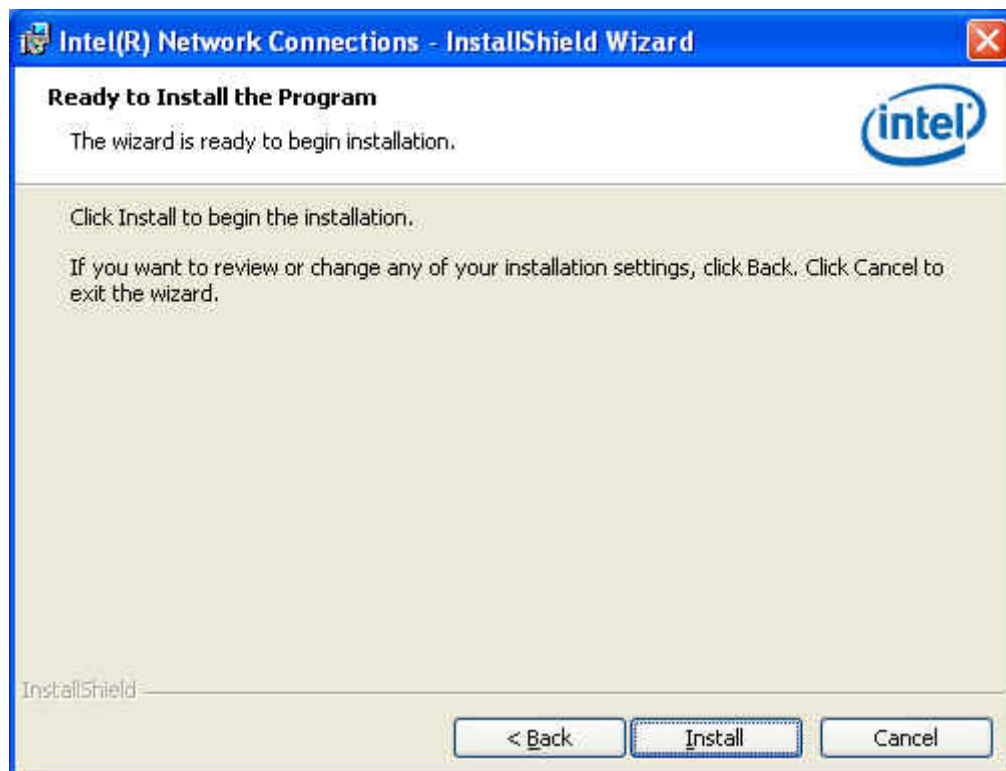
Step 2. Click “Next” to continue.



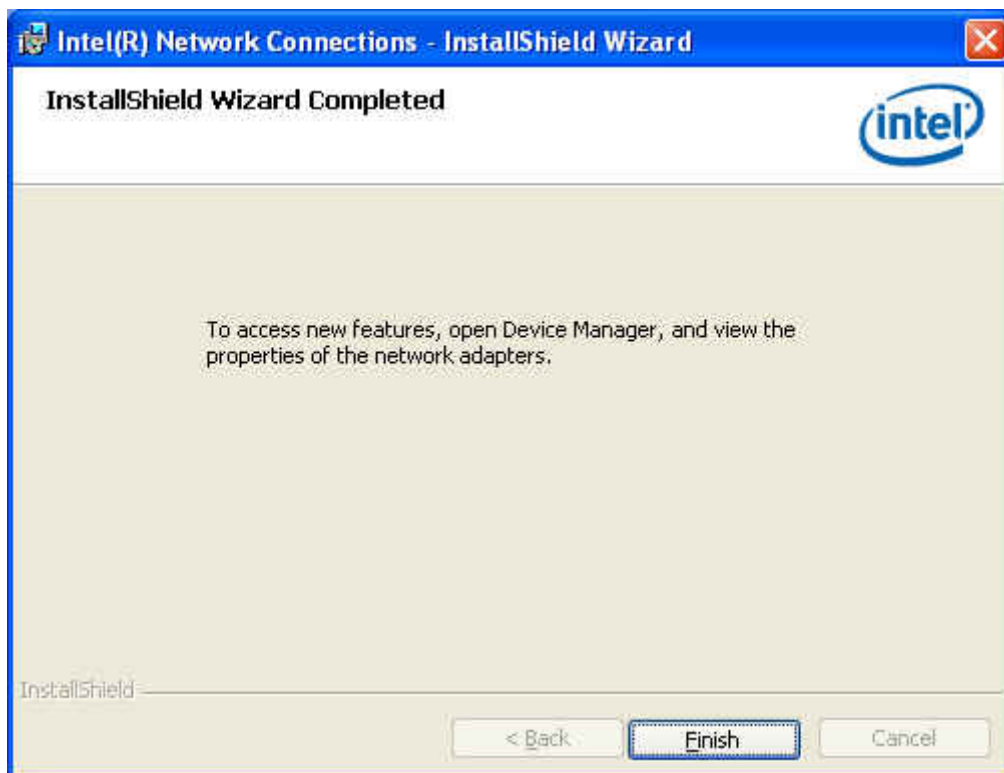
Step 3. Click “Next” to continue.



Step 4. Click “Install” to continue.

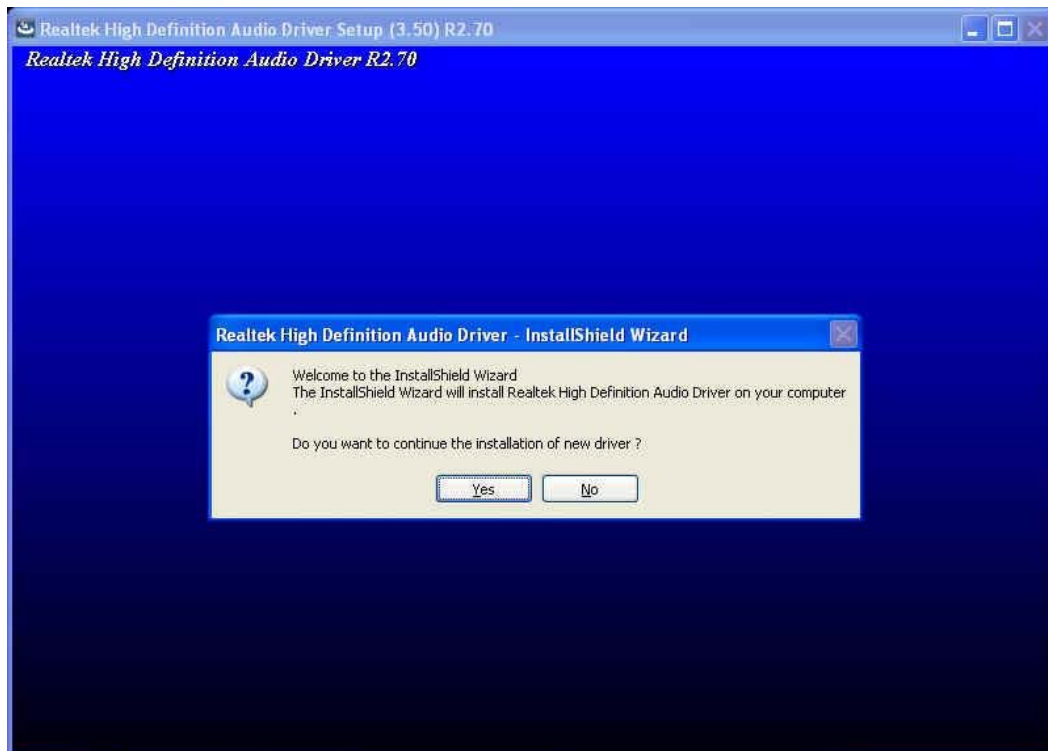


Step 5. Click “Finish” to complete setup.



3.5 Audio Driver

Step 1. Click “Next” to continue.



Step 2. Click “Finish” to complete setup.

